

DESCRIPTIONS OF NEW FORMS OF BUTTERFLIES FROM THE  
SOUTH PACIFIC.

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For some time past I have been receiving butterflies from the islands of the South Pacific, and amongst them there have been many new records and several new races. The purpose of this paper is to record the more important of these, particularly as my friend Mr. H. W. Simmonds has succeeded in capturing, in Fiji, some species of high interest. In the Transactions of the Entomological Society of London, 1904, I gave an account of some collections from Fiji, and Fruhstorfer, in Stett. ent. Zeit., 1902, also gives a list from the same islands, whilst in the Proceedings of the Zoological Society of London, 1892, Mr. H. H. Druce gives a list of the *Lycaenidae* of the South Pacific. Besides the new races described below, Mr. Simmonds was able to capture the rare *Eulepis caphontis* Hew.

NYMPHALINAE.

*Eulepis pyrrhus tiberius*, n. subsp.

♀. Above, this race differs from *sempronius* in being paler and the orange tornal patch of the hindwing is not so prominent.

Beneath, the forewing is paler, the dark bar across middle of cell is narrower. In the hindwing the central white area is larger, the three, red-brown, crescent-shaped spots towards the tornus are much smaller, the black subterminal spots are faint and the orange-brown terminal line is very pale.

*Hab.*—Lord Howe Is., Feb., 1915. One female.

When I received this specimen, I at once recognised that a distinct race inhabited the island, being much paler above and the markings beneath being obscure. Its chief difference is the great reduction of the dark subterminal spots of the hindwing beneath. There are two other specimens recorded from the island, but they seem to have been lost. The late Mr. Geo. Masters, who had seen these specimens, always considered they were different from *sempronius*.

*Hypolimnas inopinata*, n.sp.

♂. *Above*. Forewing rich black; a broad discal band beyond cell, from costa to vein 3, white margined with iridescent purple; a band of four subapical spots, white; sometimes two small discal white spots below vein 3. Cilia white, at veins black. Hindwing rich black; a very large central spot, iridescent purple. Cilia white, at veins black.

*Beneath*. Forewing red-brown; tornus shading to black; markings as above but white band not margined purple; lowest of subapical spots and two towards

tornus dusted with pale metallic-blue scales; a series of interrupted terminal lines white, towards tornus dusted with pale metallic-blue; costa towards base and upper edge of cell pale metallic-blue, extending as two pale blue bars into cell, the outer the larger; an irregular pale blue band beyond end of cell. Cilia white, at terminations of veins black. Hindwing brown; costa and bar at end of cell red-brown; basal half of wing dusted with white scales; discal series of spots pale metallic-blue; tornus black; a series of broad terminal lines white, towards tornus pale metallic-blue; a white line on dorsum near tornus, above which is an irregular pale blue area. Cilia white, at terminations of veins black.

♀ as in male, larger, more highly coloured beneath. The pale metallic markings in both sexes appear greenish in some directions.

*Hab.*—Waidoi, Fiji. Four specimens caught by Mr. Simmonds, May, July, and August, 1919. One male, Nasogoto, Navai, Fiji, caught by Mr. E. J. Goddard, Feb., 1905.

This species has puzzled me very much, coming as it does from a locality where the race of *H. bolina* is extremely variable, but the different white band above and the different underside to the hindwing do not place it with *bolina*, of which I have numbers of Fijian specimens. Mr. Simmonds, who has caught *bolina*, is confident it is distinct. He tells me that it is a purely mountain species, lives in the rain forest and, like all butterflies in Fiji, it responds readily to the first glimpse of sunshine and is only found along the rivers, where they rise rapidly to the mountains. At one time I thought it might be an extreme eastern race of *H. alimena*.

*Issoria egista* Cram.

The following races have been described from the South Pacific,—*gaberti* from Tahiti, *samoana* from Samoa, *bowdenia* from Tonga, *scyllaria* from Lifu, Loyalty Is., and *shortlandica* from the Solomon Is. Of these, the race from Samoa is the most distinct. To these I now add races from the New Hebrides and Fiji. From the typical form from the southern Moluccas, the eastern races differ chiefly in their paler upper sides, the narrower dark borders to the wings and the much smaller dark spots on the underside.

*Issoria egista ritiensis*, n. subsp.

♂. *Above.* Forewing bright orange; apex and termen narrowly black; bar beyond cell and subapical bar black. Hindwing bright orange; termen narrowly black.

*Beneath.* Forewing orange-red; a series of cell bars brown; a whitish bar beyond end of cell; between veins 5 and 6 a large whitish spot; a discal series of pale bluish lunules inwardly edged brown. Hindwing orange-red; a series of pale bluish lunules outwardly edged brown; beyond is an indication of a series of brown dots; an interrupted brown subterminal line from apex to vein 3.

*Hab.*—Labasa, Vanua Levu, Fiji, Mar., 1908, caught by Mr. R. N. Ross.

This race has much narrower dark borders to the forewings above than the Australian *propinqua* or *scyllaria*, and on the under side the pale discal spots are more prominent, whilst the discal brown spots have almost disappeared. It is intermediate between *scyllaria* and *samoana*.

*Issoria egista hebridina*, n. subsp.

♂. This race occupies an intermediate place between *ritiensis* and *scyllaria*. Above, the borders to the wings are not so narrow as in *ritiensis*, a discal series

of brown spots is indicated on the forewing, and the general colour is not quite so bright.

Beneath, the discal series of dark spots is present on both wings and the pale spots are not so prominent as in the Fijian race. In both *hebridina* and *vitiensis* the purplish suffusion found on the underside of several other races is absent. My specimens are from Vila, New Hebrides.

#### LYCAENIDAE.

##### *Dendroxiphiarbas diovella*, n. subsp.

♂. *Above.* Forewing black; a central red patch below cell in upper portion of interspace between veins 2 and 3, and slightly extending above vein 3; a slight red scaling on vein 1a at one-third from base. Cilia black. Hindwing red; costa broadly and base black; dorsum brown; termen and veins in red area faintly black; anal lobe black, inwardly bordered with red and outwardly with metallic-blue; tail very short, brown. Cilia red, towards tornus black.

*Beneath.* Forewing brown; a slightly darker bar at end of cell and a much darker brown discal band, both faintly edged whitish; dorsum paler. Cilia dark brown. Hindwing brown; a slightly darker bar at end of cell and an irregular, darker, broad discal band narrowly edged white; a subcaudal spot in area 2 black, outwardly edged orange and inwardly metallic-blue; anal lobe black, outwardly edged metallic-blue, inwardly white; tornus above anal lobe irregularly metallic-blue. Cilia dark brown.

*Hab.*—Suva, Fiji. Four males caught by Mr. Simmonds, Feb., 1920.

Allied to *diovis* from Australia and *woodfordi* from Guadalcanar, Solomon Is., but with even less red on the forewing than the latter, the tail shorter than that of *mathewi* from the New Hebrides. It agrees with the other eastern races in not having the black spot of the anal lobe above completely ringed with colour, and with the figure of *mathewi* in having the subcaudal spot of hindwing beneath crowned with metallic-blue, and not completely ringed with colour. This capture by Mr. Simmonds extends the range of *D. epijarbas* further eastward than has hitherto been known.

#### PAPILIONIDAE.

##### *Papilio macleanus insulana*, n. subsp.

♀. *Above.* Forewing brown-black; basal portion of cell and dorsum at base pale green; a spot at end of cell, a large subcostal spot at three-fourths and a smaller spot in base of area 4 green; a series of large subterminal spots cream; base of areas 2 and 1a whitish. Hindwing brown-black; base green; rest of basal half of wing whitish; a series of subterminal spots cream.

*Beneath.* Forewing as above, but paler; green basal area larger and subterminal spots obscured. Hindwing brown; basal half green, outwardly edged white; subterminal spots obscure.

*Hab.*—Lord Howe Island, where the insect is not uncommon, but very difficult to capture.

This race is readily recognised from that found in Australia by the much larger subterminal spots to both wings above. I have now seen a number of similar specimens, all females, and there is no difficulty in distinguishing them from typical *macleanus*.

## HESPERIDAE.

*Badamia exclamationis subflava*, n. subsp.

♂. *Above.* Forewing brown; costa lined yellow-brown; a large spot about middle of cell, yellowish hyaline; a pair of large discal spots in areas 2 and 3, yellowish hyaline; sometimes a minute subapical dot yellowish hyaline; sometimes an orange spot just above middle of vein 1a. Cilia brown. Hindwing brown; central area extending towards dorsum, yellow-brown. Cilia yellow-brown.

*Beneath.* Forewing yellow-brown; hyaline spots as above, margined yellowish; area 1a towards base brown-black; large patch towards tornus yellowish. Cilia brown. Hindwing yellowish-brown; indications of a paler discal band, ending above tornus in a large yellow spot; towards tornus broadly brown-black. Cilia yellowish-brown.

*Hab.*—Waidoi, Fiji, two specimens caught by Mr. Simmonds, Nov., 1919; Ba Mts., Fiji, two specimens caught by Mr. L. V. Waterhouse, Jan., 1906.

This subspecies has a much yellower appearance than any specimens from the large number I have from both within and without Australia. Mr. Simmonds' specimens are in fine condition, and he writes that on a trip in Fiji, he saw this skipper in company with a number of *Parata bilunata*. Between 6 and 7.30 a.m. numbers of skippers were seen passing the boat; the morning was wet, the wind off shore, and the distance between two and four miles.